

March 13, 2014

# **Via Electronic Comment Filing System**

Ms. Marlene H. Dortch Federal Communications Commission Office of the Secretary 445 12<sup>th</sup> Street, SW Washington, DC 20554

Re: WC Docket No. 10-90 - Expression of Interest in Conducting Rural Broadband Experiment

Dear Ms. Dortch:

Enclosed for electronic filing via the Electronic Comment Filing System ("ECFS") in compliance with Federal Communications ("FCC") Order, FCC 14-5, is the attached non-binding Expression of Interest ("EOI") for OmniTel Communications ("OmniTel") regarding the Connect America Phase II network experiments. OmniTel appreciates the opportunity to file the non-binding EOI.

If you have any questions or concerns on the attached EOI, please contact me.

Respectfully Submitted,

Rorall Jlandon, J.

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Attachments (Non-binding EOI)

# Non-Binding Expression of Interest - Phase II Rural Broadband Experiment

OmniTel Communications ("OmniTel") submits this Expression of Interest ("EOI") for Connect America Phase II Rural Broadband Experiments per Federal Communications Commission ("FCC") Order, FCC 14-5. This is Stage 1 of the FCC's Phase II experiment proposals and OmniTel anxiously awaits release of the Stage 2 formal proposal requirements.

#### **Background**

OmniTel, headquartered in Nora Springs, Iowa, along with a consortium of rural local exchange carriers within the State of Iowa have been meeting over the past several months to strategize ways the group could work together to bring improved broadband to unserved residents in the state. The consortium has over one thousand (1,000) years of combined telecommunications industry experience of deploying high quality voice and broadband services to customers in their respective ILEC and CLEC exchanges. The service areas of the consortium span 48 of 99 Iowa counties. The primary broadband network infrastructure deployed in the existing service areas of the consortium is a Fiber to the Premises (FTTP) architecture. However, some of the members have also deployed state of the art fixed wireless services also.

The participating companies have been committed to investing in their respective service areas to provide advanced broadband technologies. The fiber infrastructure of the companies has been funded either through company funds, Universal Service funds, RUS and other banking loan funds and some ARRA Broadband Stimulus funds. Currently, each participating company has Eligible Telecommunications Carrier ("ETC") status covering their ILEC and some CLEC service territories. ETC status will need to be obtained through the Iowa Utilities Board by either OmniTel or one of the participating companies, in order to provide service in some of the expanded areas where the members do not have ETC status today.

OmniTel and the participating companies, with the proper funding from the FCC, are committed to delivering state of the art broadband and voice service to every lowa resident. The consortium is currently being administered by a steering committee appointed by the participating companies. Since its formation, the consortium has been strategically planning for the future expansion of broadband deployments to the unserved areas within the state that are currently lacking service consistent with the FCC's CACM Model and the National Broadband Map.

# **Proposed Service Area**

The latest version of the Connect America Cost Model, V4, reflects approximately 80,000 unserved locations within the State of Iowa. A review of the 'Experiment Eligible Locations' spreadsheet released on February 6<sup>th</sup> by the FCC as part of the Public Notice reflects 366 different Census Tracts containing High Cost and Extremely High Cost locations. At this stage of the project, the consortium has not completed a detailed engineering design to identify specific census tracts and census blocks that would be included in the proposed service area of the CAF Experiment project. However, mapping overlays have been completed to analyze the locations of CAF Phase II eligible census blocks in relation to the existing network infrastructure and licensed spectrum assets of the participating companies to determine areas that would be able to be covered. The exact census tracts and census blocks would be provided as part of the proposal submission. Based on the mapping overlays completed to date, the

consortium is proposing to provide voice and broadband services to a total of 40,000 locations within the eligible census tracts once completed.

Based on an initial review of the proposed service area, the consortium would be able to provide high speed, quality broadband to areas that are currently lacking service. Service would be available to Community Anchor Institutions (CAIs) in the target areas across the state. Service would be made available to areas where broadband is not available at all today. A modern, state-of-the-art broadband system will expand the quality of rural health care facilities, education, and public safety. The rural areas will be able to use the broadband system for distance learning which will help educate students and connect them with the world. It will be used by professionals in the private sector to further their education. It could also be used to start up new home-based businesses. The broadband service will also be used by rural health care facilities to access the most state of the art medical applications, including online pharmacies. Last, broadband is increasingly important for agribusiness and smart farming applications in all of these areas of lowa.

As of the 2010 US Census Data, 3,046,355 people resided within the state, with approximately 1,345,738 housing units. The median household income is \$51,129, with 12.2% below poverty level. Population density is approximately 54.4 persons per mile. With this project serving roughly half of the state's unserved locations, we would anticipate that the demographics of the target area would be representative of this census data, except it would be more rural and the density would be far less.

### **Broadband Technology**

The consortium anticipates using licensed spectrum to deploy a fixed wireless broadband network for this proposed project area in order to build a high quality, robust, scalable broadband network. The sites will be served by FTTP backhaul. This technology is chosen due to the fact a fixed wireless deployment will allow for a maximum number of locations to be served at a more economically feasible basis and faster. The proposed fixed wireless network will be based on a Release 10 (R10) LTE-Advanced design, initially utilizing 15MHz of licensed spectrum with a wholly owned Enhanced Packet Core (EPC) network combined with WiMAX technology on 3.65 GHz in areas lacking licensed spectrum. An R10 LTE design will allow for the concatenation of spectrum, which could be a combination of 700MHz, PCS, AWS or BRS. This design will allow for more users, more applications and an overall more robust broadband experience for the end users.

#### **Service Offerings**

The service offerings anticipated by the consortium are voice and high-speed broadband service. Voice would consist of a Voice over Internet Protocol (VoIP) offering. Broadband would be offered at three different levels, 4Mbps down/1Mbps up, 5Mbps down/1Mbps up, and a 6Mbps down/3Mbps up speed. The proposed speed tiers are expected to be available to all homes and businesses within the range of sight of each tower, including CAIs within the proposed project area, it is estimated the project could be built and operational within an eighteen (18) to twenty four (24) month timeframe once funding has been awarded. As tower sites are set up with equipment, customers will be able to be added incrementally. It is anticipated that services will be offered as tower sites are turned up on a rolling basis until the project build is completed.

# **Funding**

The consortium estimates this project to have a total cost of approximately \$40 Million, with requested government funding under the Rural CAF Experiment of \$40 Million. The participating companies are committed to make the investment in building out the fixed wireless network. The requested funding amount will be based on annual support of \$8 Million to be requested over a five (5) year period. The funding request for this proposed project is due to the very rural characteristics of the areas that have been identified. Based on the group's review of numerous FTTP business models, the cost to build a FTTP network in order to deliver broadband to these areas is cost prohibitive. With a fixed wireless network that is proposed to serve approximately half of the currently unserved locations within the state, the consortium will be building an efficient, reliable, quality network. However, the business model requires this funding support in order to be a financially feasible.

# **Conclusion**

OmniTel and the participating companies appreciate the opportunity provided by the FCC through the Rural CAF Experiment to submit this Expression of Interest. As stated above, the consortium is considering a Fixed Wireless, R10 LTE-Advanced design combined with a WiMAX technology on 3.65 GHz build spanning across the State of Iowa. The fixed wireless network would provide the residents, business and CAI's with a high-speed, robust, scalable broadband network. The network architecture being considered would provide a large portion of Iowa with an efficient, reliable, quality network solution that offers bandwidth to areas that have been lacking service.

The consortium consists of ILECs who have over 1000 years of service to rural lowa and are dedicated and committed telecommunications providers who can get this project built. The participating companies are industry leaders, extremely knowledgeable and together, they hold the wherewithal to complete the network build to 40,000 locations and to see it to fruition while delivering advanced services to each person who lives and works within the proposed service area.